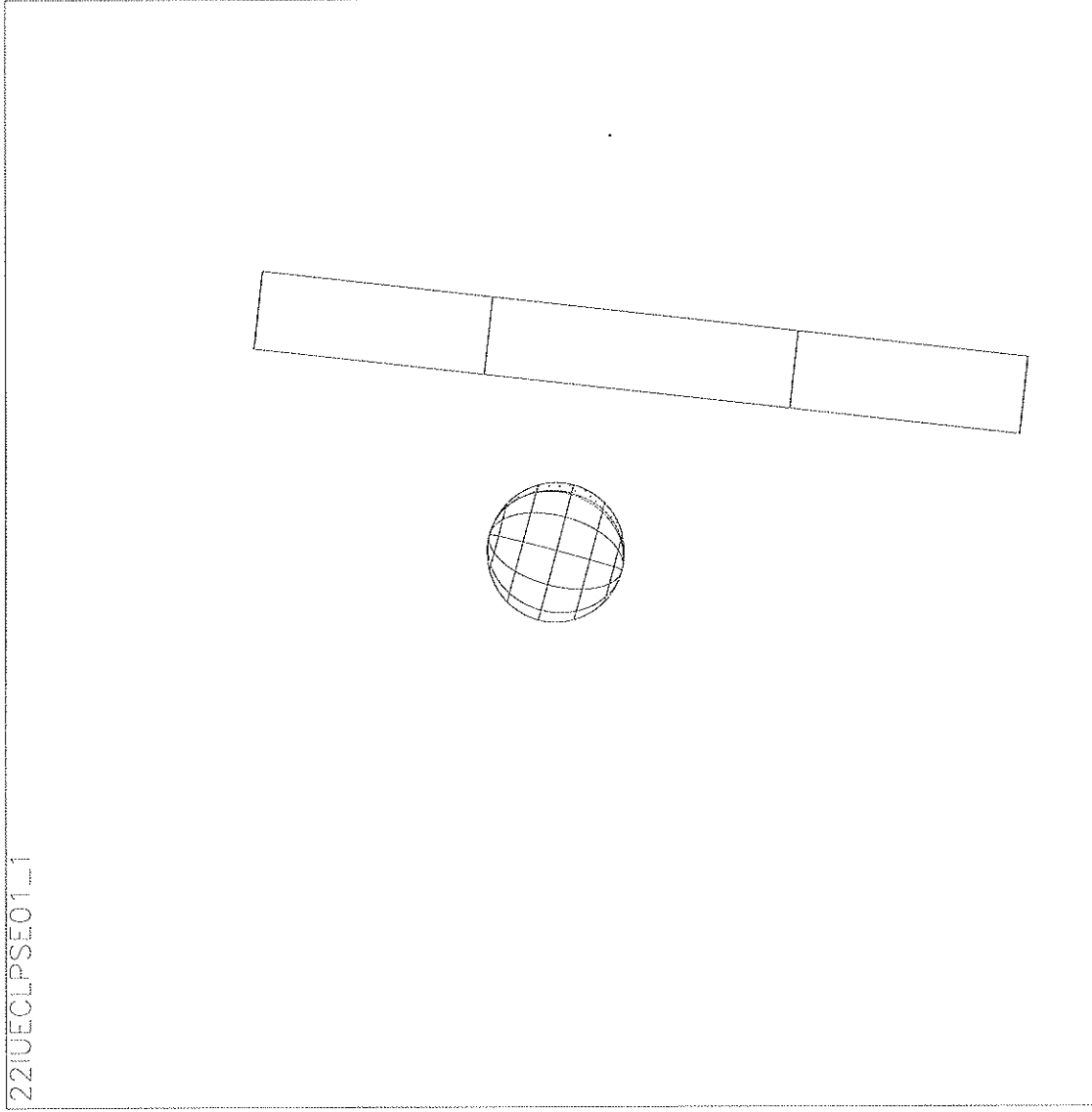


| | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------|-----------------------------------------------------------------------------------------------|----------------------|----------|
| Activity ID: Orbit 22 | | OAPEL IUECLPSE | | SeqNo 01- | |
| Title | Io aurora discovery | | | Instrument | UVS |
| Requestor | UVS-SWG/W. SWEET X30523 | Team | UVS | Working Group | SWG |
| Time System | CDS | Load ID | 22A | Calendar Date | 08/13/99 |
| | | | | Week | 85 |
| Start | IEE+CDS 00001980:00:0 | | 99-225/00:04:25.800 | IEE+001/09:22:00.000 | |
| End | IEE+CDS 00002207:00:0 | | 99-225/03:53:57.133 | IEE+001/13:11:31.333 | |
| Duration | 00000227:00:0 | | 000/03:49:31.333 | 000/03:49:31.333 | |
| Top Label | 22IUECLPSE01- | | | | |
| Bottom Label | realtime | | | | |
| Plot Key | UVS | Type | SCI | | |
| CDS Bytes | 410 | Report Options | BOTH | Scan Platform | Yes |
| CDS Source | OAP | Spin State | DUAL | DMS | Yes |
| Observation Objective | | | | | |
| <p>Io aurora (discovery) observations of H I Lyman-α, O I (1356), and PUV (H2) emissions.</p> <p>Rj = 11.4</p> <p>UVS configuration: N/N full-scan for eclipse of 50 minutes, then F/F full-scan for dayside sub-Jovian hemisphere observations.</p> <p>Eclipse starts at 224/22:47:27</p> <p>Eclipse ends at 225/00:59:01</p> <p>MBTG = 0.088560 (5 flushes)</p> <p>Leave grating in fixed mini-scan at end for PWS quiet during encounter.</p> <p>Waiver G-15 operation inside 13 Rj.</p> | | | | | |
| Design Detail | | | | | |
| PSID | CDS | RIM | COMMAND PARAMETERS | | |
| 384CA | 00 | 00:00 | COMNPT UVS RIM 0 | | |
| 157CA | 52 | 02:00 | CMDRS PLAN_DUR = 225 RIMS; EST_UVS_CMDS = 3 (34UVS) | | |
| | | 03:00 | 1 UVN:07, SCAN, NORM, NORM, NORM, SAME, 0, OFF, ON, OFF, ON, OFF, NOOVR, 1, 2C, 9D, 00, 00 | | |
| | | 54:00 | 52 UVF:07, SCAN, NORM, NORM, NORM, SAME, 0, ON, OFF, OFF, ON, OFF, NOOVR, 1, 00, 9C, 00, 00 | | |
| | | 227:00 | 225 OFF:07, SCAN, NORM, NORM, NORM, SAME, 0, ON, OFF, OFF, OFF, OFF, NOOVR, 1, 00, 9C, 00, 00 | | |
| 349CA | 28 | 02:69 | UVFLSH DISCRD, UVS | | |
| 165CA | 54 | 03:00 | TARGET subsc pt TMC (RA/Dec = 50.97/20.70) | | |
| 349CB | 28 | 26:69 | UVFLSH PACKET, UVS (1) eclipse | | |
| 349CC | 28 | 52:69 | UVFLSH PACKET, UVS (2) eclipse | | |
| 165CB | 54 | 54:00 | TARGET subsc pt TMC (RA/Dec = 55.67/21.81) | | |
| 349CM | 28 | 114:69 | UVFLSH PACKET, UVS (3) (SSI plume observation interrupt) | | |
| 349CN | 28 | 117:69 | UVFLSH DISCRD, UVS | | |
| 165CM | 54 | 118:00 | TARGET subsc pt TMC (RA/Dec = 61.38/22.95) | | |
| 349CD | 28 | 171:69 | UVFLSH PACKET, UVS (4) sub-Jovian | | |
| 349CE | 28 | 226:69 | UVFLSH PACKET, UVS (5) sub-Jovian | | |

Fri May 21 17:06:32 1999

22IUECLPSE01 ...1

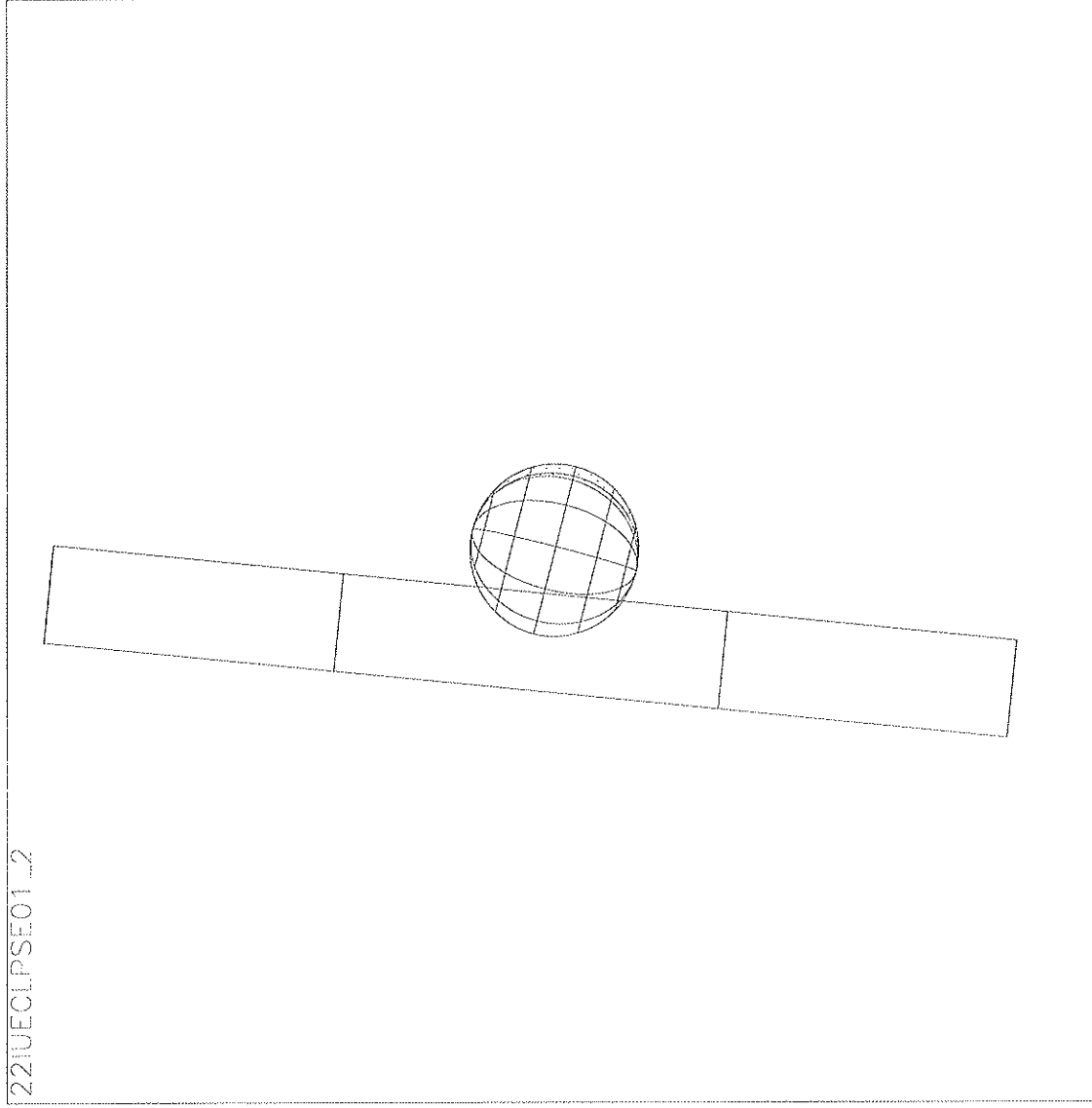


Start UTC_TIME : 1999-225 // 00:07:22.476
No End Time :
Start SCLK : 1/051235642:00:0:0

Target Body : IO
Target Ra/Dec : 50.96 / 20.70 Deg
S/C to Body Center : 1168321. Km (640.40404 R:)
Z-axis Pointing (Ra / Dec) : 211.19 / -11.27 Deg

Fri May 21 17:09:57 1999

221UECLPSE01 ...2

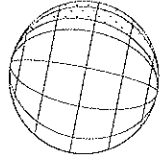
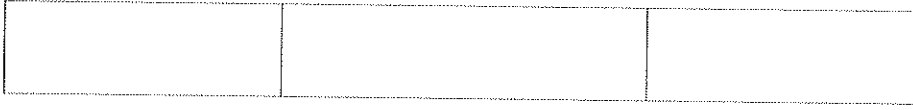


Start UTC TIME : 1999-225 // 00:28:35.142
No End Time :
Start SCLK : 1/05123661:00:0:0

Target Body : IO
Target Ra/Dec : 52.73 / 21.13 Deg
S/C to Body Center : 1184751. Km (649.40968 Ri)
Z-axis Pointing (Ra / Dec) : 211.19 / -11.27 Deg

Fri May 21 17:13:14 1999

22IUECLPSE01_3

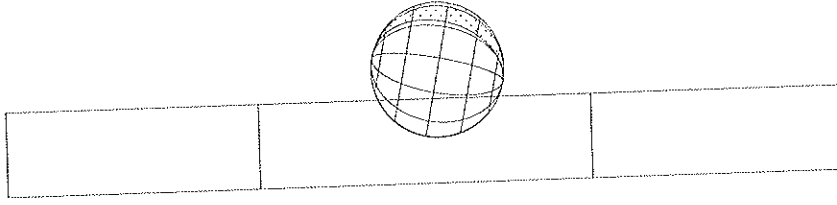


Start UTC_TIME : 1999-225 // 01:58:35.806
No End Time :
Start SCLK : 1/05123752:00:0:0

Target Body : IO
Target Ra/Dec : 60.93/ 22.87 Deg
S/C to Body Center : 1262663. Km (692.11690 Rf)
Z-axis Pointing (Ra / Dec) : 211.19 / -11.27 Deg

Fri May 21 17:16:32 1999

22IUECLPSE01...4

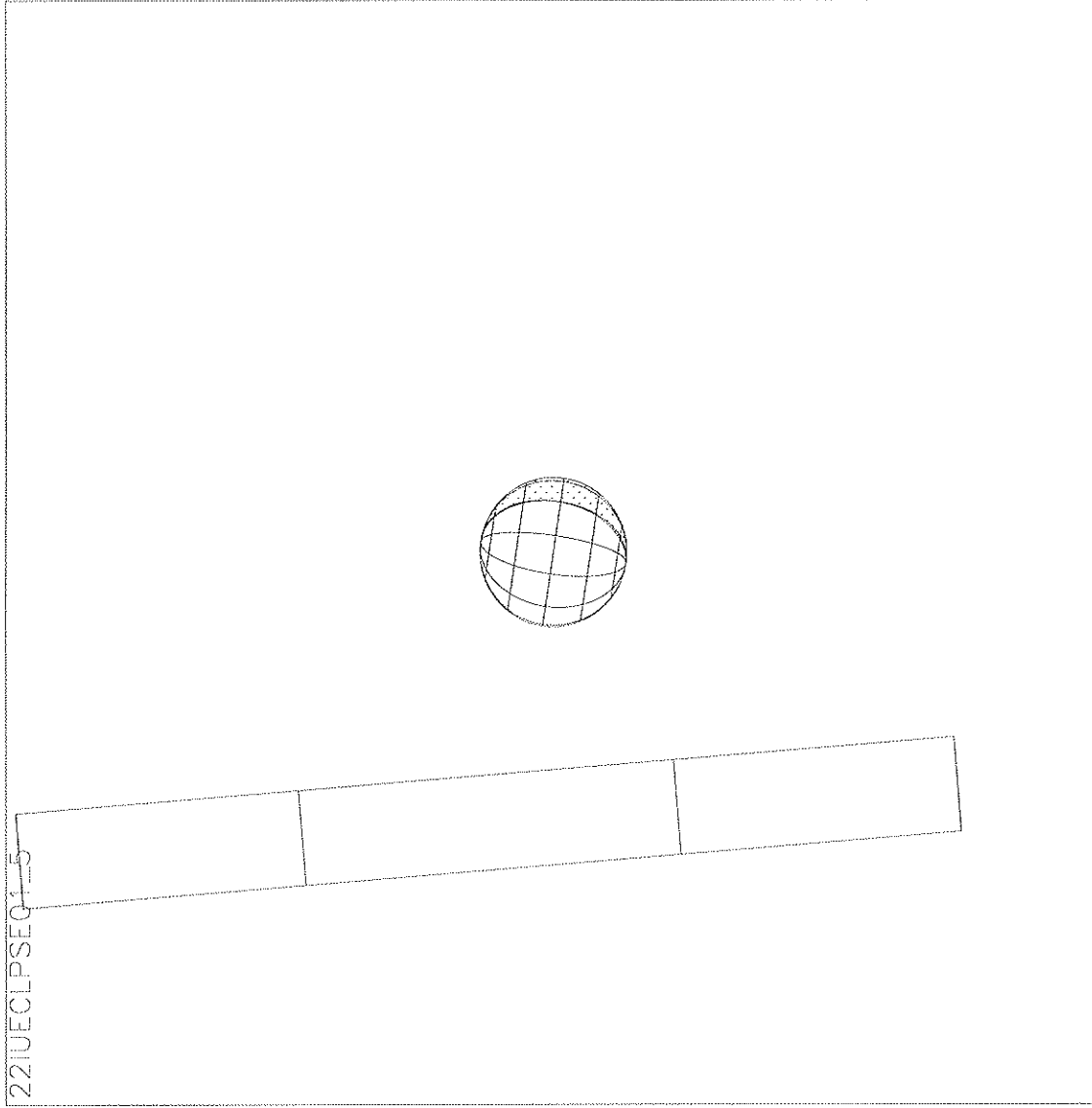


Start UTC_TIME : 1999-225 // 02:40:03.137
No End Time :
Start SCLK : 1/05123793:00:00

Target Body : IO
Target Ra/Dec : 64.49 / 23.48 Deg
S/C to Body Center : 1296917. Km (710.89275 Ri)
Z-axis Pointing (Ra / Dec) : 211.19 / -11.27 Deg

Fri May 21 17:18:59 1999

22IUECLPSEQ1_5



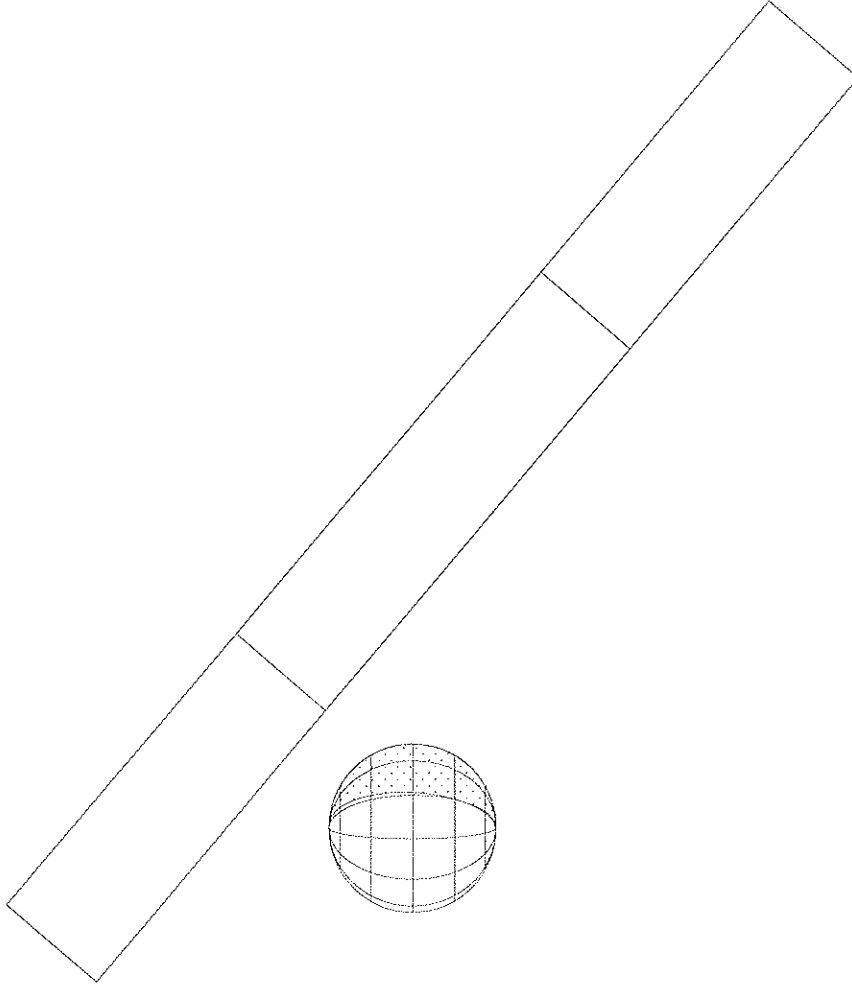
Start UTC_TIME : 1999-225 // 03:22:31.136
No End Time :
Start SCLK : 1/05123835:00:0:0

Target Body : IO
Target Ra/Dec : 68.04 / 24.01 Deg
S/C to Body Center : 1331156. Km (729.66033 R)
Z-axis Pointing (Ra / Dec) : 211.19 / -11.27 Deg

| | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------|-----------------------------------------------------------------------------------------------|---------------|----------------------|
| Activity ID: Orbit 22 | | OAPEL GUAURORA | | SeqNo 01- | |
| Title | Ganymede aurora discovery | | | Instrument | UVS |
| Requestor | UVS-AWG/W.KENT TOBISKA | Team | UVS | Working Group | AWG |
| Time System | CDS | Load ID | 22A | Calendar Date | 08/14/99 Week 85 |
| Start | JEE+CDS 00003000:00:0 | | 99-226/13:32:07.733 | | JEE+002/02:33:20.000 |
| End | JEE+CDS 00003227:00:0 | | 99-226/17:21:39.066 | | JEE+002/06:22:51.333 |
| Duration | 00000227:00:0 | | 000/03:49:31.333 | | 000/03:49:31.333 |
| Top Label | 22GUAURORA01- | | | | |
| Bottom Label | realtime | | | | |
| Plot Key | UVS | Type | SCI | | |
| CDS Bytes | 654 | Report Options | BOTH | Scan Platform | Yes |
| CDS Source | OAP | Spin State | DUAL | DMS | No |
| Observation Objective | | | | | |
| <p>Ganymede aurora (discovery) observations of H I Lyman-a and O I (1356) emissions. We will attempt to detect the Ganymede aurora in conjunction with SSI and NIMS in a mini-campaign. This is a realtime observation for TBD hours using G/G mini-scans (Ly-a and 1356) at a distance from Jupiter = 28 Rj.</p> <p>Eclipse of Ganymede occurs between 226/14:29 and 16:54</p> | | | | | |
| Design Detail | | | | | |
| PSID | CDS | RIM | COMMAND PARAMETERS | | |
| 176CC | 15 | -04:00 | SCITLM PPB; UTIL 00 04:00 SCAN TYPE 3 UTILITY; 176CD 15 06:00 SCITLM RPB | | |
| 384CB | 00 | 00:00 | COMMT UVS RIM 0 | | |
| 157CB | 66 | 02:00 | CMDRS PLAN_DUR = 225 RIMS; EST_UVS_CMDS = 4 (34UVS) | | |
| | | 03:00 | 1 UVG:DF, FIXED, NORM, NORM, NORM, SAME, 0, OFF, OFF, ON, ON, OFF, NOOVR, 1, 2C, 7D, 00, 2C | | |
| | | 02:00 | 90 UVG:D1, FIXED, NORM, NORM, NORM, SAME, 0, OFF, OFF, ON, ON, OFF, NOOVR, 1, B6, 45, 00, 00 | | |
| | | 212:00 | 210 UVG:DF, FIXED, NORM, NORM, NORM, SAME, 0, OFF, OFF, ON, ON, OFF, NOOVR, 1, 2C, 7D, 00, 2C | | |
| | | 227:00 | 225 OFF:07, SCAN, NORM, NORM, NORM, SAME, 0, ON, OFF, OFF, OFF, OFF, NOOVR, 1, 00, 9C, 00, 00 | | |
| 349CG | 28 | 02:69 | UVFLSH DISCRD, UVS | | |
| 165CF | 54 | 03:00 | TARGET sky background cone_off=5.0 TMC (RA/Dec = 87.36/25.28) | | |
| 176CE | 15 | 53:00 | SCITLM PPB; UTIL 00 61:00 SCAN TYPE 3 UTILITY; 176CF 15 63:00 SCITLM RPB | | |
| 349CH | 28 | 58:69 | UVFLSH PACKET, UVS (1) H I sky background | | |
| 165CG | 54 | 60:00 | TARGET subsc pt TMC (RA/Dec = 88.90/25.30) | | |
| 176CG | 15 | 85:00 | SCITLM PPB; UTIL 00 93:00 SCAN TYPE 3 UTILITY; 176CH 15 95:00 SCITLM RPB | | |
| 349CI | 28 | 90:69 | UVFLSH PACKET, UVS (2) Ganymede Ly-a | | |
| 165CH | 54 | 92:00 | TARGET subsc pt TMC (RA/Dec = 89.58/25.30) | | |
| 176CI | 15 | 148:00 | SCITLM PPB; UTIL 00 156:00 SCAN TYPE 3 UTILITY; 176CJ 15 158:00 SCITLM RPB | | |
| 165CI | 54 | 155:00 | TARGET subsc pt TMC (RA/Dec = 91.21/25.29) | | |
| 176CK | 15 | 189:00 | SCITLM PPB; UTIL 00 197:00 SCAN TYPE 3 UTILITY; 176CL 15 199:00 SCITLM RPB | | |
| 349CJ | 28 | 194:69 | UVFLSH PACKET, UVS (3) Ganymede 1356 | | |
| 165CJ | 54 | 196:00 | TARGET sky background cone_off=-5.0 TMC (RA/Dec = 91.74/25.27) | | |
| 349CK | 28 | 210:69 | UVFLSH PACKET, UVS (4) O I sky background | | |

Tue May 25 15:55:53 1999

22GAURORA01_L1

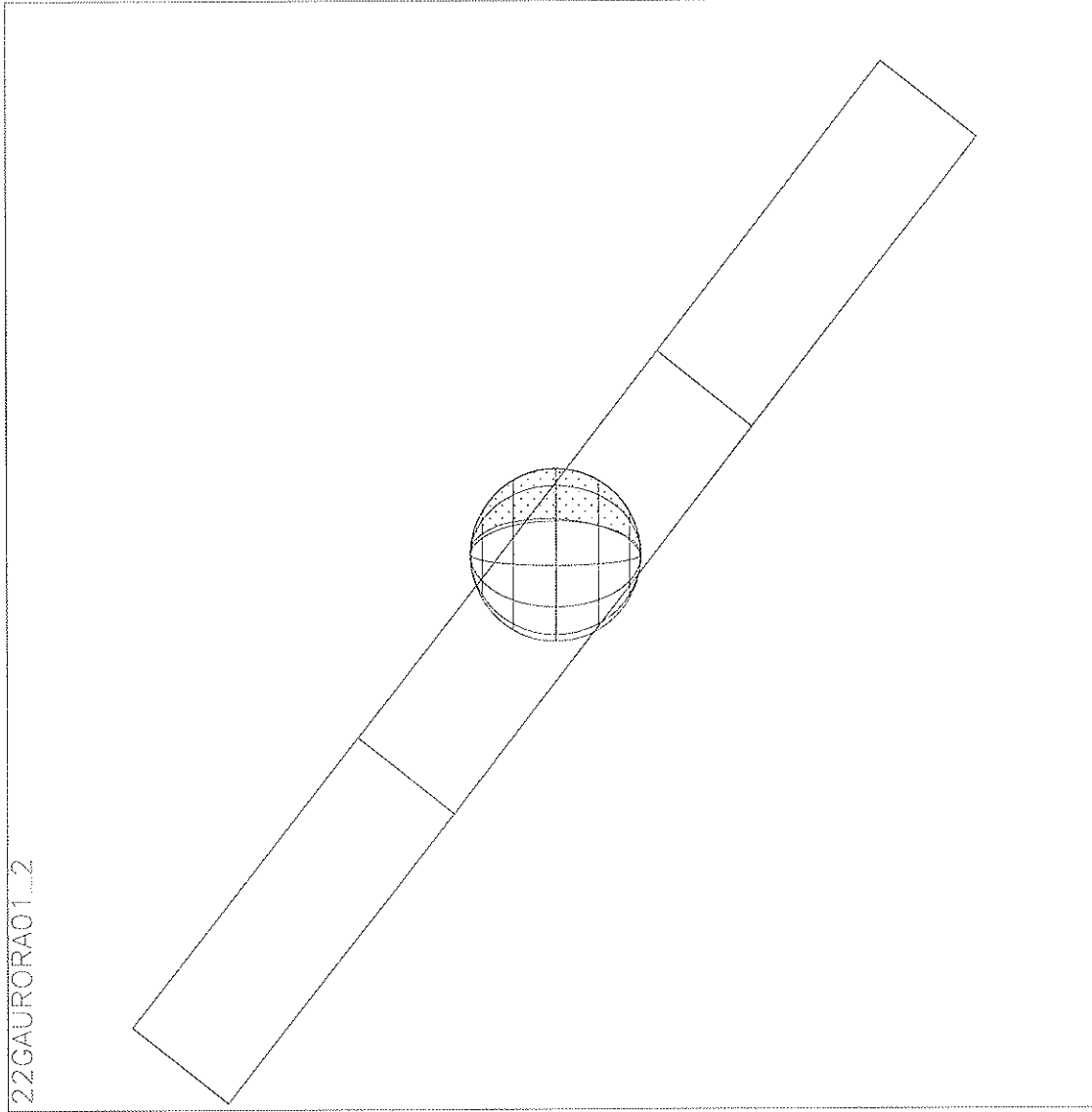


Start UTC_TIME : 1999-226 // 13:35:04.396
No End Time :
Start SCLK : 1/05125865:00:0:0

Target Body : CANYMEDE
Target Ra/Dec : 87.67 / 25.30 Deg
S/C to Body Center : 2123539. Km (806.20328 Rg)
Z-axis Pointing (Ra / Dec) : 211.19 / -11.27 Deg

Tue May 25 15:57:37 1999

22GAURORA01...2



Start UTC_TIME : 1999-226 // 13:54:17.062

No End Time :

Start SCLK : 1/05125884:00:0:0

Target Body : CANYMEDE

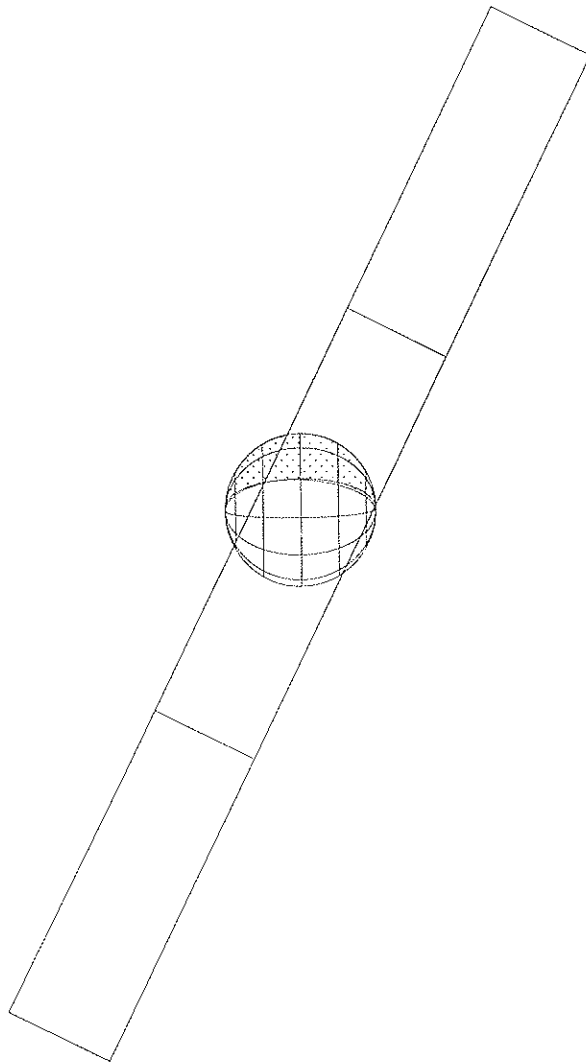
Target Ro/Dec : 88.09 / 25.30 Deg

S/C to Body Center : 2139838. Km (812.39121 Rg)

Z-axis Pointing (Ro / Dec) : 211.19 / -11.27 Deg

Tue May 25 15:59:05 1999

22GAURORA01_3

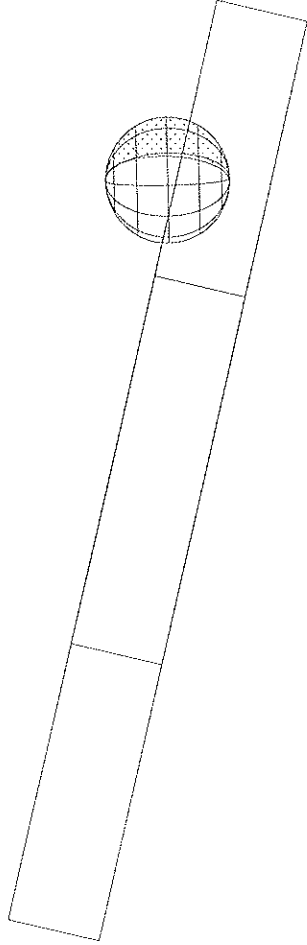


Start UTC_TIME : 1999-226 // 15:04:03.059
No End Time :
Start SCLK : 1/05125953:00:0:0

Target Body : GANYMEDE
Target Ra/Dec : 89.56/ 25.30 Deg
S/C to Body Center : 2199037. Km (834.8661; Rg)
Z-axis Pointing (Ra / Dec) : 211.19 / -11.27 Deg

Tue May 25 16:00:26 1999

22GAURORA01_4

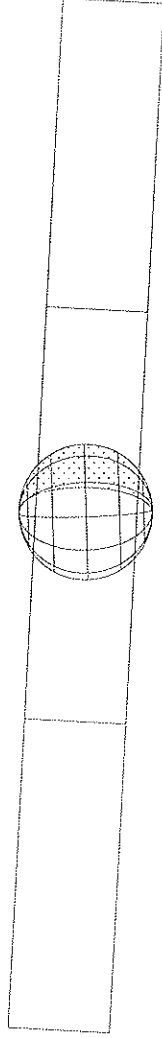


Start UTC_TIME : 1999-226 // 16:07:45.057
No End Time :
Start SCLK : 1/05126016:00:0:0

Target Body : GANYMEDE
Target Ra/Dec : 90.87 / 25.28 Deg
S/C to Body Center : 225306.: Km (855.37948 Rg)
Z-axis Pointing (Ra / Dec) : 211.19 / -11.27 Deg

Tue May 25 16:01:29 1999

22CAURORA01_5



Start UTC_TIME : 1999-226 // 16:50:13.055
No End Time :
Start SCLK : 1/05126058:00:00

Target Body : GANYMEDE
Target Ra/Dec : 91.73/ 25.27 Deg
S/C to Body Center : 2289063. Km (869.04452 Rg)
Z-axis Pointing (Ra / Dec) : 211.19 / -11.27 Deg